

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

1) RHEE, Sangki; 2) SONG, Kibang 3) KIM, Chulho; 4) RYU, Eunja;  
5) LEE, Yongbok

International Application No. PCT/KR00/0118

Serial No. NOT YET ASSIGNED

International Filing Date: 19 October 2000 (19 October 2000)

Filed: June 18, 2001For: **ENZYMATIC PRODUCTION OF DIFRUCTOSE DIANHYDRIDE IV FROM  
SUCROSE AND RELEVANT ENZYMES AND GENES CODING FOR THEM**09/868328  
JC03 Rec'd PCT/PTC  
18 JUN 2001**TRANSMITTAL LETTER**Commissioner of Patents  
Washington, D.C. 20231

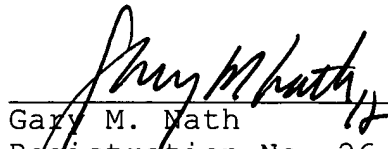
Sir:

Submitted herewith for filing in the U.S. Patent and Trademark  
Office is the following:

- (1) Transmittal Letter
- (2) Transmittal Letter To U.S. Designated/Elected Office  
(DO/EO/US) Concerning Filing under 35 U.S.C. 371
- (3) International Publication No: WO 01/29185 A1  
International Publication Date: 26 April 2001 (26.04.01)  
consisting of ~~63~~ pages including:
  - 1 Cover sheet containing the Abstract
  - ~~45~~ Pages Textual Specification
  - 1 Page Receipt in the Case of an Original Deposit
  - 6 Pages of 24 claims
  - ~~9~~ Sheets of Drawings.
  - ~~6~~ Pages Sequence Listing
- (4) Preliminary Amendment with clean copy
- (5) Unexecuted Inventor's Declaration
- (6) PCT/ISA/220 Notification of Transmittal of the International  
Search Report or Declaration
- (7) PCT/ISA/210 International Search Report
- (8) PCT/RO/101 Request
- (9) PCT/IB/301 Notification of Receipt of Record Copy
- (10) Check No. 14945 \$616.00 for Government Filing Fee as a  
small entity
- (11) Postcard for early notification of serial number.

Respectfully submitted,  
**NATH & ASSOCIATES PLLC**

By:

  
 Gary M. Nath  
 Registration No. 26,965  
 Gerald L. Meyer  
 Registration No. 41,194  
 Customer No. 20529

 Date: June 18, 2001  
 NATH & ASSOCIATES PLLC  
 1030<sup>th</sup> 15<sup>TH</sup> Street, NW - 6<sup>th</sup> Floor  
 Washington, D.C. 20005  
 GMN/JLM/dd:PCTappl.trans

U.S. DEPARTMENT OF COMMERCE, PATENT AND TRADEMARK OFFICE		DATE: 18 June 2001 (18.06.2001)
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>		U.S. APPL. NO. (if known): Not Yet Assigned <b>09/868328</b>
INTERNATIONAL APPLICATION NO.: PCT/KR00/01183	INTERNATIONAL FILING DATE: 19 October 2000 (19.10.00)	PRIORITY DATE CLAIMED: 19 October 1999 (19.10.99)
<b>TITLE OF INVENTION: ENZYMATIC PRODUCTION OF DIFRUCTOSE DIANHYDRIDE IV FROM SUCROSE AND RELEVANT ENZYMES AND GENES CODING FOR THEM</b>		
APPLICANT(S) FOR DO/EO/US: 1) RHEE, Sangki; 2) SONG, Kibang; 3) KIM, Chulho; 4) RYU, Eunja; 5) LEE, Yongbok		
Applicant hereby submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This express request to begin national examination procedures (35 USC 371(f)) The submission must include items(5), (6), (9) and (21) indicated below.</li> <li>4. <input type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)): <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US)</li> </ol> </li> <li>6. <input type="checkbox"/> A English translation of the International Application as filed (35 U.S.C. 371(c)(2).</li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>		
<b>ITEMS 11 to 20 BELOW CONCERN OTHER DOCUMENT(S) OR INFORMATION INCLUDED:</b>		
<ol style="list-style-type: none"> <li>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</li> <li>14. <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter2 and 35 USC 1821 - 1825</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 USC 154(d)(4)</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 USC 154(d)(4)</li> <li>20. <input checked="" type="checkbox"/> Other items or information:</li> </ol>		
<p>TRANSMITTAL FORM; FEE CALCULATION; INTERNATIONAL PUBLICATION WO 01/29185 A1 WITH;  INTERNATIONAL PUBLICATION DATE 26 APRIL 2001 CONSISTING OF 68 PAGES INCLUDING; 45 PAGES  TEXTUAL SPECIFICATION, 1 PAGE RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT; 6 PAGES OF 24 CLAIMS;  1 COVER SHEET CONTAINING THE ABSTRACT; 9 SHEETS DRAWINGS; 6 PAGES SEQUENCE LISTING;  PRELIMINARY AMENDMENT WITH CLEAN COPY; UNEXECUTED INVENTOR'S DECLARATION; PCT/ISA/220  NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT OR DECLARATION; PCT/ISA/210  INTERNATIONAL SEARCH REPORT; UNEXECUTED INVENTOR'S DECLARATION; PCT/RO/101 REQUEST;  PCT/IB/301 NOTIFICATION OF RECEIPT OF RECORD COPY.</p>		

ATTORNEY'S DOCKET NO: 24679

09/868328 N/A APPLICATION NO. (if known) not yet assigned		INTERNATIONAL APPLICATION NO.  PCT/KR00/01183	DATE: 18 June 2001 (1806.2001)	
<p>17. <u>x</u> The following fees are submitted:</p> <p><b>Basic National Fee (37 CFR 1.492(a)(1)-(5):</b> Search Report has been prepared by the EPO or JPO:.....\$860.00</p> <p>International preliminary examination fee paid to USPTO (37 CFR 1.482).....\$690.00</p> <p>No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)).....\$710.00</p> <p>Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO.....\$1000.00</p> <p>International preliminary examination fee (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4).....\$ 100.00</p> <p style="text-align: right;">ENTER APPROPRIATE BASIC FEE AMOUNT =</p>			<u>CALCULATIONS</u>	<u>PTO USE ONLY</u>
			\$1,000.00	
			\$ 1,000.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than ____ 20 ____ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).			\$	
CLAIMS	NO. FILED	NO. EXTRA	RATE	
TOTAL	24 -20=	4	X \$ 18.00	\$ 72.00
INDEPENDENT	5 - 3=	2	X \$ 80.00	\$ 160.00
Multiple dependent claims(s) (if applicable)			+ \$260.00	\$ 0.00
TOTAL OF ABOVE CALCULATIONS =			\$	1,232.00
Reduction by 1/2 for asserting small entity, if applicable. (Note 37 CFR 1.9, 1.27, 1.28).			\$	616.00
SUBTOTAL =			\$	616.00
Processing fee of \$130.00 for furnishing the English translation later than ____ 20 ____ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).			+	\$ 0.00
TOTAL NATIONAL FEE =			\$	616.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +			\$	0.00
TOTAL FEES ENCLOSED =			\$	616.00
			Amount to be: refunded	\$
			charged	\$

ATTORNEY'S DOCKET NO: 24679

<b>09/868328</b> U.S. APPLICATION NO. (if known) not yet assigned	INTERNATIONAL APPLICATION NO.  <b>PCT/KR00/01183</b>	DATE: <b>18</b> June 2001 ( <b>18.06.2001</b> )
---	--	---

a. ☒ One check in the amount of \$616.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. 14-0112 in the amount of \$ \_\_\_\_\_ to cover the above fees. (A duplicate copy of this sheet is enclosed.)

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0112.

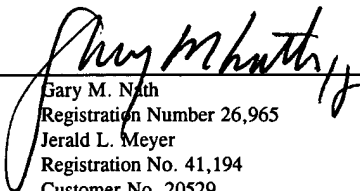
d. Fees are to be charged to a credit card ☐ WARNING: Information on this form may become public ☐ Credit Card Information should not be included on this form. ☐ Provide credit card information and authorization on PTO-2038 ☐

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed to request that the application be restored to pending status.

Send All Correspondence To:

Gary M. Nath  
NATH & ASSOCIATES PLLC  
1030 15<sup>th</sup> Street, N.W.  
Sixth Floor  
Washington, D.C. 20005

(202) 775-8383 (phone)  
(202) 775-8396 (fax)

  
\_\_\_\_\_  
Gary M. Nath  
Registration Number 26,965  
Jerald L. Meyer  
Registration No. 41,194  
Customer No. 20529